

IN THE CLAIMS:

1. (Currently Amended) A machining unit, for the machining of workpieces, the machining unit comprising:

one or more machining stations each with robots including a robot with a joining tool; and

at least one turning station having at least two work stations for carrying out different operations simultaneously, said turning station having at least two multiaxially movable turning units arranged next to one another with gripping tools and with movable turning units working areas, which intersect each other at [[the]] said work stations, one work station being a workpiece support and another workstation being a joining station, said robot with a joining tool being arranged at said joining station for carrying out joining operations at said joining station.

2. (Previously Presented) A machining unit in accordance with claim 1, wherein said turning units are designed as said rotatable transport robots.

3. (Previously Presented) A machining unit in accordance with claim 1, wherein said transport robots are designed as stationary or unstationary, multiaxial articulated arm robots.

4. (Currently Amended) A machining unit in accordance with claim 1, [[,]] wherein said transport robots are designed as heavy-load robots with a load carrying capacity of about

500 kg or more.

5. (Previously Presented) A machining unit in accordance with claim 1, wherein said turning units carry said replaceable gripping tools for said different workpieces corresponding to different body models.

6. (Previously Presented) A machining unit in accordance with claim 1, wherein a plurality of said gripper storage units are arranged in said working area of said turning units.

7. (Previously Presented) A machining unit in accordance with claim 1, wherein said gripping tools are designed as geometry grippers, which hold said workpiece in a defined position.

8. (Previously Presented) A machining unit in accordance with claim 1, wherein one said work station is designed as a workpiece pick-up and said other work station as a joining welding site.

9. (Previously Presented) A machining unit in accordance with claim 1, wherein said turning station with at least one said work station is connected in said transfer direction to at least one said machining station equipped with one or more said robots, wherein said work station(s) is/are located in said working area of said robots.

10. (Previously Presented) A machining unit in accordance with claim 1, wherein said machining station has at least one workpiece storage unit for a replaceable robot tools in said working area of said robots.

11. (Previously Presented) A machining unit in accordance with claim 1, wherein said machining station has one or more component feeds in said working area of said robots.

12. (Previously Presented) A machining unit in accordance with claim 1, wherein said machining station has one or more stationary machining devices in said working area of said robots.

13. (Previously Presented) A machining unit in accordance with claim 1, wherein said machining unit has a manual or automatic workpiece feed means at the inlet of transfer line and a manual or automatic workpiece storage unit at the outlet.

14. (Currently Amended) A machining unit in accordance with claim ~~[[14]]~~ 13, wherein said workpiece feed means and/or said workpiece storage unit forms a work station of a turning station.

15. (New) A machining unit for machining workpieces, the machining unit comprising:

a plurality of welding machining stations having multiaxially movable welding robots with a welding tool head for welding the workpieces, each welding robot moving to form a defined working area;

5 a plurality of turning stations having at least two multiaxially movable turning units having a gripping tool head, one turning station being arranged adjacent to another turning station, each turning unit moving to form a defined working area, said working area of said turning unit overlapping said working area of said welding robot to define at least two work stations, one work station being a workpiece pick up work station and another work station  
10 being a welding work station, said turning unit picking up the workpiece at said workpiece pick up work station and transferring the workpiece to said welding work station;

a manual or automatic feed means for presenting the workpieces to said plurality of turning stations; and

a manual or automatic removal means for removing workpieces.

16. (New) A machining unit in accordance with claim 14, wherein a first welding robot is arranged adjacent to a second welding robot such that the working area of said first welding robot intersects with the working area of said second welding robot and intersects with the working area of said turning unit at said welding work station.

17. (New) A machining unit or the machining of workpieces, the machining unit comprising:

a first turning station having a first multiaxially movable turning unit with a first gripping tool, said first multiaxially movable turning unit being movable to define a first movable turning unit work volume;

a second turning station having a second multiaxially movable turning unit with a second gripping tool, said second movable turning unit being to define a second movable turning unit work volume, said first turning station being arranged next to said second turning station, said first movable turning unit work volume overlapping with said second movable turning unit work volume to define a first work station for picking up the workpiece and a second work station for welding the workpiece, said first turning unit or said second turning station picking up the workpiece at said first work station and transferring the workpiece to said second work station;

a welding station having a multiaxially movable welding robot, said movable welding robot having a welding tool for welding the workpiece, said welding robot moving to define a welding work volume, said welding work volume overlapping said second movable turning unit work volume at said second work station;

a manual or automatic feed means for presenting the workpieces to said first turning station.

18. (New) A machining unit in accordance with claim 17, further comprising a manual or automatic removal means for removing workpieces.